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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,403	08/11/2000	Aldo M. Pitt	0046.2001-000	7297
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HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133				
EXAMINER CINTINS, IVARS C				
ART UNIT 1724		PAPER NUMBER		

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/637,403

Applicant(s)

PITT ET AL.

Examiner

Ivars C. Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-41, 43-45, 50-61, 63-70 and 72-82 is/are pending in the application.
- 4a) Of the above claim(s) 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-41, 43-45, 50, 51, 53-61, 63-70 and 72-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 38, 39, 41, 43-45, 50, 53-59, 63-68, 73, 76, 78, 80 and 82 are again rejected under 35 U.S.C. 102(b) as being anticipated by Stankowski et al. (U.S. Patent No. 5,674,395). As pointed out in the previous Office Action, the reference discloses a multiwell filtration device which utilizes an ultrafiltration membrane (col. 1, line 33) positioned at an angle with respect to the direction of gravitational force (col. 1, line 22-23). This reference further discloses an embodiment wherein the membrane is flat and is located at the bottom of a chamber (see Fig. 8); and this is all that is required by claims 38, 39, 41, 43-45, 50, 53-59, 63-68, 73, 76, 78, 80 and 82.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40, 51, 60, 61, 69, 70, 72, 74, 75, 77, 79 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stankowski et al. The reference discloses the claimed invention with the exception of: (1) the recited wedge (claims 40, 51 and 81); (2) the exact angle of the membranes (claims 60, 69, 72, 75 and 79); and (3) the exact number of wells employed (claims 61, 70, 74 and 77). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a "wedge" to adjust the angle of orientation of the reference membranes, since wedges are typically used to produce and maintain an object at

an angle. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to angle the membranes of the reference system in the manner recited in claims 60, 69, 72, 75 and 79, since this reference clearly discloses a range which overlaps these values (see col. 4, line 28). Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the recited number of wells in the reference system, in order to increase its treatment capacity.

Applicant's arguments filed August 21, 2003 have been noted and carefully considered, but are not deemed to be persuasive of patentability. Applicant argues that Stankowski et al. does not show a flat membrane at the bottom of a storage chamber because the embodiment shown in Figure 8 of this reference has been termed "no bottom" by the patentee. Applicant further urges that the filters are located in converging sidewalls, not the bottom, of the chamber shown in this figure. It is pointed out, however, that vessels which have the structural configuration shown in Figure 8 of Stankowski et al. are typically referred to as having a "tapered bottom" (see the patents cited below); and therefore, one of ordinary skill in the fluid handling art would consider the converging walls 102 of the device shown in Fig. 8 to constitute the "bottom" of reservoir 100. Applicant should note that the "bottom" of a vessel need not be horizontal; it may be rounded, tapered, or assume some other configuration.

Applicant also argues, that Stankowski et al. does not show membranes that are coplanar with a plate, as required by claim 78 and its dependent claims 80 and 82. It is pointed out, however, that this reference clearly shows (see Figs. 8 and 9) a device having a plurality of filtering wells (104 in Fig. 8; and 112 in Fig. 9), membranes coplanar with the plate (106 in Fig.

8; and 114 in Fig. 9), and an angling mechanism of the type recited (see col. 4, lines 28-29 and 32-34); and this is all that is required by claims 78, 80 and 82.

Applicant further argues that Stankowski et al. never appreciated that their devices could suffer from the “smile” effect, nor do they teach how to overcome the issue. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the device of the reference system also effects filtration at an angle to the direction of applied gravitational force; and therefore, this reference device must also inherently prevent the above noted “smile” effect.

Ichikawa et al. (U.S. Patent No. 3,617,033), Kronsbein (U.S. Patent No. 3,653,562), Ettel et al. (U.S. Patent No. 4,119,539), and Stoeppler et al. (U.S. Patent No. 4,203,840) all show vessels having a tapered bottom. See col. 1, line 61 and col. 2, lines 53-54 and 58 of Ichikawa et al.; col. 2, lines 15-16 of Kronsbein; col. 2, line 45 of Ettel et al.; and col. 3, lines 39-40 of Stoeppler et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 1724

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (703) 308-1261.

The centralized facsimile number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.


Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
November 16, 2003